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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,305

Applicant(s)

HAYASHI, RYOJI

Examiner

BRUK A. GEBREMICHAEL

Art Unit

3715

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-10, 12-16 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12-16 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/15/2009 has been entered.
2. Currently, claims 1, 5-7, 9-10, 12-14 and 20 have been amended. Claims 4, 11, and 17-19 have been cancelled. Therefore, claims 1-3, 5-10, 12-16 and 20 are pending in this application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- Claims 1-3, 5-9, 13-16 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claimed limitation *"a second identification information transmission device for transmitting a/the second identification information obtained by the recognized*

characteristic information before starting to transmit the control signal with the first identification information" as recited in claims 1-3, 5-9 and 13; and the claimed limitation "a movable machine specification information transmission device for transmitting before starting to transmit the control signal with the transmitter identification information, a movable machine specification information obtained by the recognized characteristic information" as recited in claims 14-16 and 20 are not described in the specification so as to enable one of ordinary skill in the art to make or use of the claimed invention.

Note that according to Applicant's disclosure, the *first identification information* is an ID number that is stored in the memory of the transmitter that relates with a particular movable machine such as a tank model (see Page 14, lines 6-13 of Applicant's specification). On the other hand, the *second identification information* is the vehicle number of the movable machine (tank) stored in the memory of the transmitter containing characteristic information of the movable machine (see Page 17, lines 1-16 of Applicant's specification).

However, the disclosure does not describe that the transmitter transmits one of the above identification information (*the second identification information or the movable machine specification information*) **before** transmitting the other identification information (which is the *first identification information*); rather, contrary to the above claims, the specification describes that the transmitter transmits both identification information without any order. For example, the line "... then **initial data is transmitted** from the **transmitter 2**. The initial data is transmission data created by the

transmitter 2 to bring the tank model 1 into a state in which the tank model 1 can operate. The **initial data includes the vehicle number information 10** stored in the pertinent vehicle recognition ROM 3 and the **ID number information 21 . . .**" (Page 19, lines 9-18) clearly indicates the fact that Applicant's disclosure does not require the system to transmit one of the identification information **before** transmitting the other identification information unlike the limitations recited in the above claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton 5,888,135.

Regarding claim 10, Barton teaches the following claimed limitations, a movable machine moved by a control signal with a first identification information transmitted from a transmitter, when the first identification information transmitted with the control signal is coincident with a first identification information associated with the movable machine (FIG 1, label 12 and col.11, lines 14-22), the movable machine comprising, a storage device storing characteristic information including a second identification information for specifying the movable machine itself (FIG 3, labels 124/126), a discrimination device responsive to transmission of a second identification information specifying a movable machine to be controlled transmitted from the transmitter, (FIG 4, labels 128-132) the

discrimination device determining whether remote control conducted by the transmitter that has transmitted the second identification information is allowed, depending on whether the received second identification information is coincident with the second identification information stored in the storage device (col.10, lines 7-18); and a remote control prohibition device responsive to discrimination that the remote control is not allowed, prohibiting control of the movable machine by the control signal, even if the control signal transmitted with the first identification information coincident with the first identification information associated with the movable machine is received (see col.10, lines 12-16).

Note that regarding storing the second identification information in the movable machine's storage device, one of ordinary skill in the art at the time of the invention was made would readily recognize the fact from the teaching of Barton that the second identification information of the vehicle is stored in the vehicle's memory, and the vehicle would respond to a transmitter that transmits a signal having this second identification information. For example the line, "The microcontroller 122 causes the vehicle 12 to operate in the inactive but powered state when **the address of the vehicle 12 has been entered into the random access memory 126** . . . When the vehicle 12 receives **this address** from an individual **one of the pads 42a-42d**, it **operates** in accordance with **commands received from such individual one** (e.g. the pad 42b) of the **pads**." (col.14, lines 59-67 and col.15, lines 1-2). Here the commands received by the vehicle correspond to the *second identification information*. The

reference also teaches that the vehicle stores the *second identification information* in its memory (col.10, lines 12-16).

Regarding claim 12, Barton further teaches, the discrimination device determines whether the remote control conducted by the transmitter that has transmitted the second identification information is allowed, on the basis of information based on the characteristic information stored in the storage device and the received second identification information (col.10, lines 11-16 and col.11, lines 15-22).

- Claims 1-3, 5-9, 13-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton 5,888,135 in view of Nishiyama 2003/0060287.

Regarding claim 1, Barton teaches the following claimed limitations, a remote control system comprising a transmitter transmitting a control signal with a first identification information (FIG 1, label 64 and col.5, lines 53-65); and a movable machine remote-controlled on the basis of the control signal transmitted from the transmitter when the first identification information transmitted with the control signal is coincident with a first identification information associated with the movable machine (FIG 1, label 12 and col.11, lines 14-22), a recording medium having characteristic information associated with the movable machine recorded thereon, the characteristic information including second identification information specifying the movable machine, (FIG 3, label 96/98 and col.8, lines 30-38), the transmitter comprises a characteristic information recognition device recognizing the characteristic information concerning the movable machine to be controlled, recorded on the recording medium (see e.g. col.8, lines 59-67), and a second identification information transmission device transmitting

the second identification information obtained by the recognized characteristic information (FIG 3, label 68), and the movable machine comprises a storage device for storing the characteristic information including second identification information associated with itself (FIG 4, labels 124/126), a discrimination device for determining whether remote control conducted by the transmitter that has transmitted the second identification information is allowed depending on whether the received second identification information is coincident with the second identification information stored in the storage device (col.6, lines 9-20 and col.10, lines 6-18), and a remote control prohibition device responsive to discrimination that the remote control is not allowed, prohibiting control of the movable machine by the control signal, even if the control signal with the first identification information coincident with the firm identification information associated with the movable machine is received (col.10, lines 6-18).

However, Barton does not explicitly disclose the remote control system having a recording medium existing independently of the transmitter and the movable machine.

Nishiyama discloses a game machine and a game system invention that teaches, a remote control system having a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use

the same system for multiple different types of games without the need to change the system.

Regarding the recited limitation, "*transmission device transmitting the second identification information obtained by the recognized characteristic information before starting to transmit the control signal with the first identification information*", Applicant has not disclosed any importance as to why this feature (i.e. sending the *second identification information* before sending the *first identification information*) is critical to the current invention (or solves any stated problem); and therefore, the system of the prior art appears to work well for the intended purpose.

Regarding claim 2, Barton in view of Nishiyama teaches the claimed limitations as discussed above.

Nishiyama further teaches, the recording medium is detachably attached to the transmitter (Para.0083, lines 1-5).

Therefore, for the same reason stated above, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Barton in view of Nishiyama teaches the claimed limitations as discussed above. Barton further teaches,

Regarding claim 3, writing into the recording medium is not conducted by users (FIG 3, label 96),

Regarding claim 5, the movable machine comprises a remote control enabling device enabling the movable machine to be remote-controlled on the basis of the first identification information after the discrimination device has judged the remote control to be allowed (col.10, lines 51-67),

Regarding claim 6, the movable machine comprises a discriminant determining whether the movable machine should operate on the basis of the control signal, and the remote control enabling device enables the remote control on the basis of the first identification information, by controlling the discriminant (col.10, lines 19-30),

Regarding claim 7, a transmitter excluding device disabling the remote control conducted by another transmitter except for the transmitter enabled first by the discrimination device, even if the other transmitter is the transmitter to control the movable machine on the basis of the first identification information (col.11, lines 14-22),

Regarding claim 8, the transmitter excluding device disables the remote control conducted by the other transmitter, by using information based on transmission timing of the control signal transmitted by the transmitter (col.11, lines 14-22),

Regarding claim 9, the characteristic information comprises information concerning control laws characteristic to the movable machine associated with the characteristic information, and the transmitter comprises a control signal transmission device creating a control signal based on the control laws and transmitting the created control signal (col.6, lines 9-21).

Regarding claim 13, Barton teaches the following claimed limitations, a transmitter transmitting a control signal with a first identification information to remote-control a movable machine combined as a control object with the transmitter on the basis of first identification information (FIG 1, labels 64 and 12 and col.5, lines 53-65), the transmitter comprising a characteristic information recognition device recognizing characteristic information of the movable machine recorded on a recording medium (FIG 3, label 96/98 and col.8, lines 30-37), and a second identification information transmission device transmitting a second identification information obtained by the recognized characteristic information, the second identification information specifying the movable machine to be controlled (FIG 3, label 68 and col.8, lines 51-58).

However, Barton does not teach, the recording medium existing independently of the transmitter and the movable machine.

Nishiyama teaches, a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Here also, regarding the recited limitation, *"transmission device transmitting a second identification information obtained by the recognized characteristic information*

before starting to transmit the control signal with the first identification information",
Applicant has not disclosed any importance as to why this feature (i.e. sending the *second identification information* before sending the *first identification information*) is critical to the current invention (or solves any stated problem); and therefore, the system of the prior art appears to work well for the intended purpose.

Regarding claim 14, Barton teaches the following claimed limitations, a remote control system comprising a transmitter transmitting a control signal with a transmitter identification information and a movable machine remote-controlled by the control signal when the transmitter identification information therewith is coincident with an identification information associated with the movable machine (FIG 1, labels 64 and 12 and col.5, lines 53-65), wherein the remote control system comprises a recording medium having characteristic information associated with the movable machine recorded thereon, the characteristic information including movable machine specification information specifying the movable machine (FIG 2, labels 96/98 and col.8, lines 30-38), the transmitter comprises a characteristic information recognition device recognizing the characteristic information associated with the movable machine to be controlled (col.8, lines 59-67), and a movable machine specification information transmission device transmitting a movable machine specification information obtained by the recognized characteristic information (FIG 3, label 68) and the movable machine comprises a storage device storing the characteristic information including a movable machine specification information associated with itself (FIG 4, labels 124/126), a discrimination device determining whether remote control conducted by the transmitter

that has transmitted the movable machine specification information is allowed depending on whether the received movable machine specification information is coincident with the movable machine specification information stored in the storage device (col.10, lines 19-30 and col.14, lines 59-67); and a remote control prohibition device responsive to discrimination that the remote control is not allowed, prohibiting control of the movable machine by the control signal, even if the control signal with the transmitter identification information coincident with the identification information associated with the movable machine is received (col.10, lines 6-18).

However, Barton does not teach, the recording medium existing independently of the transmitter and the movable machine.

Nishiyama discloses a game machine and a game system invention that teaches, a remote control system having a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore here also, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Regarding the imitation, "*transmission device transmitting before starting to transmit the control signal with the transmitter identification information, a movable machine specification information*", Applicant has not disclosed any importance as to

why this feature (i.e. sending the *second identification information* before sending the *first identification information*) is critical to the current invention (or solves any stated problem); and therefore, the system of the prior art appears to work well for the intended purpose.

Regarding claim 15, Barton in view of Nishiyama teaches the claimed limitations as discussed above.

Nishiyama further teaches, the recording medium is detachably attached to the transmitter (Para.0083, lines 1-5).

Therefore as already stated above, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Regarding claim 16, Barton in view of Nishiyama teaches the claimed limitations as discussed above.

Barton further teaches, the characteristic information comprises information concerning control laws characteristic to the movable machine associated with the characteristic information, and the transmitter comprises a control signal transmission device for creating the control signal based on the control laws and transmitting the created control signal (col.5, lines 53-65 and col.6, lines 9-21).

Regarding claim 20, Barton teaches the following claimed limitations, a transmitter transmitting a control signal with a transmitter identification information to remote-control a movable machine (FIG 1, label 64 and col.5, lines 53-65), the transmitter comprising a characteristic information recognition device capable of recognizing characteristic information of the movable machine recorded on a recording medium (FIG 3, labels 96/98 and col.8, lines 11-17), and a movable machine specification information transmission device transmitting a movable machine specification information obtained by the recognized characteristic information, the movable machine specification information specifying the movable machine to be controlled (col.10, lines 11-17 and lines 61-67).

Barton does not teach, the recording medium existing independently of the transmitter and movable machine.

Nishiyama teaches, a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

As already discussed above, regarding the recited feature *"transmission device transmitting, before starting to transmit the control signal with the transmitter*

identification information, a movable machine specification identification information",
Applicant has not disclosed any importance as to why this feature (i.e. sending the *second identification information* before sending the *first identification information*) is critical to the current invention (or solves any stated problem); and therefore, the system of the prior art appears to work well for the intended purpose.

Response to Arguments.

5. Applicant's arguments filed on 07/15/2009 have been fully considered. In the remarks, the Applicant argues that,

(1) Claim 1 requires that the movable machine discriminate based on two separate pieces of identification information, i.e., the first and second identification information. The first identification information is conventional identification information . . .

Claim 1 recites that before starting to transmit the control signal, the transmitter obtains and transmits the second identification information acquired from the recording medium . . .

In contrast, Barton discloses only a single piece of identifying information that is used by a vehicle to determine if the vehicle should respond to remote control. Barton discloses that the particular toy vehicle to be controlled is selected by pressing a button 58 a particular number of times. (Barton, Column 5, Lines 53-65). According to the Examiner, the signal generated by the multiple depressions of the button 58 corresponds to the "first identification information" of claim 1. (Detailed Action, Page 3, Line 10 - Page 4, Line 2)

All of the information for identifying one of the toy vehicles disclosed by Barton, that is, the number of depressions of button 58 to make an operation pad correspond to a specific toy vehicle (Barton, Column 10, Lines 50-60), the address generated by the depressions (Barton, Column 10, Lines 50-60), and the particular address of the toy vehicle pre-set at the factory (Barton, Column 10, Lines 18-21), correspond to only the "first identification information" of claim 1 . . .

Moreover, Nishiyama does not disclose any identification information used to specify a device to be controlled among multiple devices. Nishiyama merely discloses a game cartridge 20 that is detachably connected to a transmitter. (Nishiyama, paragraph [0083]) . . .

- In response to argument (1), the Examiner respectfully disagrees. Barton does teach or suggest the two types of identification information, the first identification information and the second identification information. According to Applicant's disclosure, the *first identification information* is an ID number (Page 14, lines 8-11 of the specification), and the *second identification information* is a vehicle number or characteristic information of the movable machine such as charging time information, maximum velocity information, etc. (Page 17, lines 5-16 of the specification).

Barton's invention also describes such two types of identification information (*first identification information* and *second identification information*) that are consistent with Applicants current claimed invention. For instance, according to Barton's invention, the system has transmitters and plurality of vehicles that are controlled by one or more of the transmitters (col.5, lines 53-60). The reference further teaches that the transmitters

transmit address information and data signals to the plurality of vehicles where a particular transmitter may control only one or more of the vehicles (col.8, lines 51-58).

Thus, based on the teaching of Barton, the *address information* corresponds to the *first identification information* recited in the currently presented claims since this address information is utilized to identify (i.e. ID) a given vehicle (movable machine) that is going to be controlled by a given transmitter. This teaching is consistent with the current claimed invention since the *first identification information* according to Applicant's disclosure is an ID number that is utilized to identify a particular tank to be controlled by the transmitter.

Barton also teaches that the transmitter transmits data signals (i.e. *second identification information*) besides the address information (*first identification information*). For example the line, "The expanded system including the microcomputers 94 and 94a may be adapted so that **the address and data signals** generated in the microcomputer 94a may be **transmitted by the antenna** 68 in the central station 64 when the central station 64 serves as the master station." (col. 9, lines 54-58), clearly suggests that the transmitter transmits not only address information, but also data signals (i.e. *second identification information*) that provides operation instruction to the vehicle that receives the signals.

Note that the transmitter has additional buttons or switches for the second identification information. For example the line "Buttons 60a and 60b are also included on each of the pads 42a, 42b, 42c and 42d. When depressed, the buttons 60a and 60b respectively close switches 62a and 62b in FIG. 2. The closure of the switch 62a is

instrumental in producing an operation of the motor 32 in a direction to lift the bin 18 in the dump truck 12 when the dump truck has been selected by the proper number of **depressions of the button 58**. In like manner, when the dump truck 12 has been selected by the proper number of depressions of the switch 58, the closure of the switch 62b **causes the selective one of the bin 18 in the dump truck 12 move downwardly** as a result of **the operation of the motor 32 in the reverse direction**."(col.6, lines 9-20) clearly teaches that once the transmitter selects a particular vehicle based on its address (which is accomplished for example by depressing button 58), the transmitter commands the operation of that vehicle using operation data signals (i.e. *second identification information* which is accomplished for example by depressing buttons 60a and 60b). These data signals transmitted by the transmitter correspond to the *second identification information* recited in the currently presented claims.

Note that according to Applicant's disclosure, the *second identification information* is information characteristic of the movable machine (tank) such as *vehicle number information, maximum velocity information, control laws* (Page 17, lines 5-16 of Applicant's specification); and as already described above, the teaching of the prior art is consistent with Applicant's current claimed invention.

Regarding Applicant's argument that *the transmitter obtains and transmits the second identification information acquired from the recording medium before starting to transmit the control signal*, Applicant current disclosure appears to be silent regarding this feature. According to the current disclosure, the transmitted data includes both the

first identification information and the *second identification information* (see e.g. Page 19, lines 9-18), i.e. the disclosure does not require a particular order regarding the information transmission. Thus, since Applicant has not disclosed any importance as to why this feature (i.e. sending the *second identification information* before sending the *first identification information*) is critical to the current invention (or solves any stated problem), the system of the prior art appears to work well for the intended purpose.

Furthermore, even though the reference describes that the vehicles have switches that are pre-set at the factory to indicate a particular number, the reference also teaches that the number can be modified by the user to indicate a different number by changing the pattern of closing of the switches (col.10, lines 19-27). Applicant's argument with this regard appears to be based on only the first few lines of col. 10 of the reference.

Regarding the secondary reference, (Nishiyama), it is combined to teach for example the limitation regarding "a remote control system having a recording medium existing independently of the transmitter and the movable machine". Thus, the secondary reference is not necessarily required to teach each and every claimed feature that have already been taught by the primary reference.

Therefore, the Examiner concludes that Applicant's currently presented claimed features have already been taught or suggested by the prior art.

(2) Claim 1 requires that the second identification information is generated from the characteristic information of the movable machine stored on the recording medium, and that "the recording medium exist[s] independently of the transmitter and the movable

machine." Thus, because the recording medium is independent of both the transmitter and the movable machine, only a user who has the recording medium associated with a particular movable machine can control the movable machine. Therefore, the second identification information stored on the medium, allows the system to discriminate based upon which user has the proper recording medium. The combination of references cited by the Examiner fails to teach or suggest storing information specific to a particular movable machine on removable recording medium to thereby limit remote control of the movable machine to authorized users. The Examiner admits that Barton does not disclose a recording medium existing independently of the transmitter and the movable machine. (Detailed Action, Page 8, Lines 9-10). Further, Nishiyama merely discloses a cartridge for storing a game program. (Nishiyama, Paragraph [0045]). Thus, the combination of references cited by the Examiner also does not disclose this feature of the present invention.

- In response to argument (2), the Examiner respectfully disagrees. Barton's reference does teach or suggest that the transmitter has a *recording medium* on which the second identification information is stored. For example, the line "The **random access memory** 98 also **stores** the status of the operation of the switches 46, 48, 50 and 52 for each pad and the **operation of the switches** 57, 59, **62a, 62b**, 63a and 63b for each pad."(col.8, lines 17-20) teaches that the memory (i.e. the recording medium) of the transmitter stores information regarding the status of the switches 62a and 62b. As already discussed (response to argument (1) above), these switches are related to the buttons 60a and 60b that transmit the data signals (i.e. the *second identification*

information) commanding the operation of the selected vehicle(s). Therefore, Barton's invention already teaches or suggests the limitation regarding storing the *second identification information* in the recording medium of the transmitter.

Of course, it has also been pointed out that Barton does not explicitly teach that the recording medium exists independently of the transmitter and the movable machine.

However, Nishiyama teaches such a recording medium mountable to a transmitter that exists independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote controller in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Note also that the secondary reference does not have to necessarily teach every claimed feature that have already been taught by the primary reference. For instance, Nishiyama does not have to necessarily teach that the recording medium contains the *second identification information* since this limitation has already been addressed by the primary reference.

It should further be noted that according to the currently presented claims (e.g. see claim 1), it is the movable machine that comprises a discriminating device to discriminate a given transmitter; however, the above argument appears to refer to the

transmitter with a discriminating device. Nevertheless, the discriminating device is a *recording medium* that contains information corresponding to a particular movable machine.

Thus, based on such interpretation, the *recording medium* of Barton is also utilized as a discriminating device since the vehicle (movable machine) discriminates a given transmitter based on the data the transmitter transmits to the vehicle. The reference suggests that the vehicles (movable machines) operate based on the information contained in the data signals when this information agrees with the stored information in the vehicle's memory. For instance the line, "For example, the read only memory 124 may **store information** indicating the sequence of the successive bits of information in each packet **for controlling the operation of the motors** 28, 30, 32 and 33 in the vehicle 12." (col.10, lines 11-15) teaches that the vehicle(s) operate according to the command of the transmitter if the data signals (*second identification information*) received from the transmitter agrees with the operation information (characteristic information) stored in the memory of the vehicle(s).

Note also that regarding Applicant's above argument, it is not the detachable nature of the *recording medium* that makes the *recording medium* as a discriminating device; rather, it is the information stored in the *recording medium* that makes the *recording medium* a discriminating device. For example, if there are two detachable *recording mediums* that contain identical data corresponding to one particular movable machine (tank) and if these two *recording mediums* are mounted on two different transmitters (e.g. Transmitter A and Transmitter B), the movable machine is not capable

of distinguishing the data transmitted from these two transmitters because they both transmit identical information. Note that in this example, the *recording medium* is detachable (or exists independently of the transmitter and the movable machine); nevertheless, it fails to function as a discriminating device. This simple analysis illustrates the fact that it is not the detachable nature of the *recording medium* that makes the *recording medium* as a discriminating device, but it is the data recorded on the *recording medium* that makes the *recording medium* as a discriminating device.

- The Examiner has carefully studied Applicant's argument with respect to claims 10, 13-14 and 20. Applicant argued that these claims also recite similar features as that of claim 1 which the applied references failed to teach or suggest.

However, as already discussed in the above two sections (response to argument (1) and response to argument (2)), the Examiner concludes that the combined teaching of the references does teach or suggest Applicant's currently presented claimed features.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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